1997/A006 (09/237,12e, Page 2



wherein

R is a hydrogen atom or an alkyl group; R₁ is an alkylene group, a substituted alkylene group, a cycloalkylene group, a substituted cycloalkylene group, a phenylene group or a substituted phenylene group; R₂ is a phenyl group, -COOH, a halogen atom, a cyano group, an alkoxyl group or -COOR6 in which R6 is a substituted or nonsubstituted, alkyl or aryl group or an ethylacetoacetate group; R₃ is -COOD; D is an organic chromophore which absorbs the exposed wavelength (100-450 nm) and represents a substituted or non-substituted, benzene ring, condensed ring or heterocyclic ring bonded directly or through alkylene group; X is O or S; Y is O or NR4 group in which R₄ is either a hydrogen atom or a substituted or non-substituted, phenyl group or cyclic, linear or branched alkyl group; Z is O, ND group or NR₅ group in which R₅ is either a hydrogen atom or a substituted or non-substituted, phenyl group or cyclic, linear or branched alkyl group; and n, p and q are simple integers including zero and m and o are also simple integers including zero while at least one of them is greater than zero; further provided that at least one of the following conditions is met: (1) m and q are both greater than 0; (2) n and o are both greater than 0; (3) n and p are both greater than 0; (4) m and p are both greater than 0; and (5) m and o are both greater than 0; and (6) m, n, and o are all greater than 0.

(3

19. (Once amended) A polymer according to claim 17, wherein R is a hydrogen atom or a methyl group, R_1 is an ethylene group, X is an oxygen atom, Y is -NR₄ group in which R_4 is either a hydrogen atom or a substituted or non-substituted, phenyl group or cyclic, linear or branched alkyl group, D is an organic chromophore which absorbs the exposed wavelength (100-450 nm) and represents a substituted or non-substituted,



1997/A006 (09/237,125, Page 3



63

benzene ring, condensed ring or heterocyclic ring bonded directly or through an alkylene group, and n, p and q are simple integers including zero and m and o are also simple integers including zero while at least one of them is greater than zero.



32. (New) A composition for an anti-reflective coating or a radiation absorbing coating containing a polymer as represented by the following General Formula II and/or blocked derivatives thereof,

General Formula II:

wherein

R is a hydrogen atom or an alkyl group; R_1 is an alkylene group, a substituted alkylene group, a cycloalkylene group, a substituted cycloalkylene group, a phenylene group or a substituted phenylene group; R_2 is a phenyl group, -COOH, a halogen atom, a cyano group, an alkoxyl group or -COOR $_6$ in which R_6 is a substituted or non-substituted alkyl or aryl group or an ethylacetoacetate group; R_3 is -COOD; D is an organic chromophore which absorbs the exposed wavelength (100-450 nm) and represents a substituted or non-substituted, benzene ring, condensed ring or heterocyclic ring bonded directly or through an alkylene group; X is O or S; Y is O or NR $_4$ group in which R_4 is either a hydrogen atom or a substituted or non-substituted phenyl group or cyclic, linear or branched alkyl group; Z is O, ND group or NR $_5$ group in which R_5 is either a hydrogen atom or a substituted, phenyl group or cyclic, linear or branched alkyl group; and n, p and q are simple integers including zero and m and o are also simple integers including zero while at least one of them is greater than zero; wherein the proportion of total molar numbers of monomer units of polymer which have isocyanate group, thioisocyanate group or blocked derivatives

1997/A006 (09/237,125, Page 4



- thereof to total molar numbers of monomers and monomer units of polymers in the composition is 0.1 to 40 mol%.
 - 33. (New) A composition for an anti-reflective coating or a radiation absorbing coating containing a polymer as represented by the following General Formula II.

General Formula II'

wherein

R is a hydrogen atom or an alkyl group; R₁ is an alkylene group, a substituted alkylene group, a cycloalkylene group, a substituted cycloalkylene group, a phenylene group or a substituted phenylene group; R₂ is a phenyl group, -COOH, a halogen atom, a cyano group, an alkoxyl group or -COOR6 in which R6 is a substituted or nonsubstituted alkyl or aryl group or an ethylacetoacetate group; R₃ is -COOD; D is an organic chromophore which absorbs the exposed wavelength (100-450 nm) and represents a substituted or non-substituted, benzene ring, condensed ring or heterocyclic ring bonded directly or through an alkylene group; X is O or S; Y is O or NR₄ group in which R₄ is either a hydrogen atom or a substituted or non-substituted phenyl group or cyclic, linear or branched alkyl group; Z is O, ND group or NR₅ group in which R₅ is either a hydrogen atom or a substituted or non-substituted, phenyl group or cyclic, linear or branched alkyl group; and n, p and q are simple integers including zero and m and o are also simple integers including zero while at least one of them is greater than zero; further provided that at least one of the following conditions is met: (1) m and g are both greater than 0; (2) n and o are both greater than 0; (3) n and p are both greater than 0; (4) m and p are both greater than 0; and (5) m and o are both greater than 0; and (6) m, n, and o are all greater than 0.

2



- 34. (New) The composition of claim 33, wherein R_1 is $-CH_2CH_2$ -; R_2 is $-COOR_6$; R_4 is a hydrogen atom; and R_5 is a hydrogen atom.
- 35. (New) A composition for an anti-reflective coating or a radiation absorbing coating according to claim 33, wherein the polymer as represented by General Formula II is a polymer as represented by the following General Formula II'.

General Formula II'

wherein

 R_8 is a hydrogen atom or a methyl group; R_2 is a phenyl group, -COOH, a halogen atom, a cyano group, an alkoxyl group or -COOR $_6$ in which R_6 is a substituted or non-substituted, alkyl or aryl group or an ethylacetoacetate group; R_3 is -COOD; D is an organic chromophore which absorbs the exposed wavelength (100-450 nm) and represents a substituted or non-substituted, benzene ring, condensed ring or heterocyclic ring bonded directly or through an alkylene group; Z is O, ND group or NR $_5$ group in which R_5 is either a hydrogen atom or a substituted or non-substituted, phenyl group or cyclic, linear or branched alkyl group; and m, n, o, p and q are simple integers including zero while at least one of m and o is greater than zero and m, n, o, p and q together lie between 5 to 50,000; further provided that at least one of the following conditions is met: (1) m and q are both greater than 0; (2) n and o are both greater than 0; (5) m and o are both greater than 0; and (6) m, n, and o are all greater than 0.



36. (New) A composition for an anti-reflective coating or a radiation absorbing coating according to claim 33, wherein the polymer as represented by General Formula II is a polymer as represented by the following General Formula II"

General Formula II"

wherein

 R_8 is a hydrogen atom or a methyl group; R_2 is a phenyl group, -COOH, a halogen atom, a cyano group, an alkoxyl group or -COOR $_6$ in which R_6 is a substituted or non-substituted, alkyl or aryl group or an ethylacetoacetate group; R_3 is -COOD; D is an organic chromophore which absorbs the exposed wavelength (100-450 nm) and represents a substituted or non-substituted, benzene ring, condensed ring or heterocyclic ring bonded directly or through an alkylene group; R_4 is either a hydrogen atom or a substituted or non-substituted, phenyl group or cyclic, linear or branched alkyl group; Z is O, ND group or NR_5 group in which R_5 is either a hydrogen atom or a substituted or non-substituted, phenyl group or cyclic, linear or branched alkyl group; and m, n, o, p and q are simple integers including zero while at least one of m and o is greater than zero and m, n, o, p and q together lie between 5 to 50; further provided that at least one of the following conditions is met: (1) m and q are both greater than 1; (2) n and o are both greater than 0; (3) n and p are both greater than 0; (4) m and p are both greater than 0.

37. (New) A composition for an anti-reflective coating or a radiation absorbing coating according to claim 35 or 36, wherein D is a group selected from phenyl, substituted phenyl, benzyl, substituted benzyl, napthalene, substituted napthalene, anthracene, substituted anthracene, arthraguinone, substituted anthraguinone, acridine,